

REMARKS

Applicants have carefully studied the outstanding Office Action. The present submission is intended to be fully responsive to the rejections raised by the Office Action and is believed to place the application in condition for allowance. Further, Applicants do not acquiesce to any of the Office Action rejections not particularly addressed. Favorable reconsideration and allowance of the application is respectfully requested.

Claimed Invention

The application as filed contained 16 claims. Of these, claims 1, 6, 11, and 12 are in independent format. Claims 2-5 ultimately depend from claim 1, claims 7-10 ultimately depend from claim 6, and claims 13-16 ultimately depend from claim 12. Each of the dependent claims necessarily includes all the elements from the base claims and any intervening claims.

Applicants have amended claim 11. Applicants submit, however, that any amendment to the claims is not for the purpose of narrowing the claims for patentability, but rather, to clarify the program steps included in the computer program for discovering one or more phones on a network. The Applicants have also amended claims 4-6, 9-10, 12-13, and 15-16 for grammatical errors. As such, the amendment to these claims is also not for the purpose of narrowing the claims for patentability. In addition, Applicants have added claims 17-20, each of which depend from independent claim 1. Support for the amended and new claims may be found throughout the present specification, and in particular, the description of the preferred embodiments starting on page 3. No new matter has been added.

Independent claim 1 recites a method of discovery and display of one or more phones on a network. The method includes the steps of discovering a phone by means of a first protocol, using discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network; and discovering other devices on the network using a different protocol.

Similarly, independent claim 6 recites a computer program on a computer readable medium or embodied in a carrier wave for use in discovery and display of one or more phones on a network. The computer program includes a (i) program step for establishing the topology of the network, and (ii) a program step for using this information to insert an icon representing a relevant phone into a display of the topology of the network. The program step for establishing the topology of the network, in turn, includes a program step for establishing the topology of the network using a first protocol, and a program step for establishing the topology of the one or more phones using a different protocol.

Like independent claim 6, independent claim 11 recites a computer program on a computer readable medium or embodied in a carrier wave for use in discovery of one or more phones on a network. The computer program includes (i) a program step for using SNMP to discover entities of the network, including managed devices, a telephone controller and MAC addresses of unmanaged phones, (ii) a program step for changing from SNMP to HTML, (iii) a program step for loading a web page from the telephone controller, (iv) a program step for parsing information from the web page to establish correspondence between a particular phone and a MAC address, (v) a program step for finding a port associated with the MAC address of the particular phone, (vi) a program step for retrieving relevant details of the particular phone, wherein retrieving the relevant details is conditioned upon determining that only the MAC address of the particular phone is associated with the port, (vii) a program step for displaying on a network map a phone icon connected to the network via a port icon that is representative of the port, wherein displaying the phone icon connected to a port icon is conditioned upon determining that only the MAC address of the particular phone is associated with the port, (viii) a program step for displaying on the network map a device icon connected to the network via the phone and port icons, wherein displaying the device icon is conditioned upon determining that two MAC addresses are associated with the port, and one of the

two MAC addresses is associated with the phone; and (ix) a program step to display on the network an unmanaged aggregator cloud icon connected to the network via the port icon, wherein displaying the unmanaged aggregator cloud icon is conditioned upon determining that (ii) at least two MAC addresses are associated with the port, and (ii) the at least two MAC addresses are not associated with the phone.

Finally, independent claim 12 recites an apparatus for use in the discovery of one or more phones on a network. The apparatus includes means to discover on the network a phone and another device using respective first and second protocols, and means to use discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network.

Thus, as can be readily discovered, independent claims 1, 6, 11, and 12 in one way or another include a combination of elements directed to (i) "discovering a phone by means of a first protocol" that is different from the protocol used to discover other devices on the network, and (ii) "using discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network." Since each of the dependent claims necessarily include the elements of the claims from which they depend, claims 2-5, 7-10, and 13-19 include elements (i) and (ii) as well.

Rejection of Claims 1-16 under 35 U.S.C. §102(e)

The Office Action rejected claims 1-16 under 35 U.S.C. § 102(e) as being anticipated by the U.S. Patent 6,516,345 granted to Kracht ("Kracht"). Applicants respectfully traverse the rejection of claims 1-16 based on the following arguments.

Response to Rejection of Claims 1-16 under 35 U.S.C. §102(e)

Applicants respectfully submit that rejected claims 1-16, as well as new claims 17-20, are not anticipated by *Kracht* because such reference does not show, describe or disclose, explicitly or

inherently, the combination of elements of independent claims 1, 6, 11, and 12. This combination includes, for example, the elements directed to (i) "discovering a phone by means of a first protocol" that is different from a protocol used to discover other devices on the network, and (ii) "using discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network." Applicants submit that *Kracht* does not disclose such elements.

In contrast to the claimed invention, *Kracht* discloses (i) discovering a plurality of known devices that are located in a network, (ii) determining the physical links that exist between the known devices in the network, and (iii) creating and storing information that represents a topology of the network based on the information representing the plurality of known devices and the physical links. See *Kracht* at col. 3-4.

In *Kracht*, a discovery mechanism functions to discover a plurality of known devices by first contacting a Simple Network Management Protocol (SNMP) agent of each device associated with a network address in order to request identification information from the SNMP agent. *Id.* at col. 4. If the SNMP agent of a device associated with a network address responds to a SNMP request, the discovery mechanism in *Kracht* functions to discover the device by (i) identifying the device type based on the information contained in the response, and (ii) once the device is identified (i.e., once the device is known), gathering and processing additional information associated with the device using one or more protocols, such as SNMP and/or Cisco Discovery Protocol (CDP). *Id.* at col. 7-15. Then, after the discovery mechanism discovers the known device, the discovery mechanism may use the identity and information associated with the known device to generate a topology of the network. *Id.* at col. 15.

If the SNMP agent of a device associated with a network address does not respond to the discovery mechanism's SNMP request, however, then the discovery mechanism in *Kracht* cannot determine the device type or gather information associated with the unidentified device. *Id.* at col.

12-13 (emphasis added). This unidentifiable device, or "black cloud device," may be device that does not support SNMP, or may be a device whose SNMP agent does not support the information required to identify the device. *Id.* Thus, because the discovery mechanism in *Kracht* cannot determine what the "black cloud device" is, the discovery mechanism can only infer the location (and not the type of details) of the "black cloud device" within the network topology based on information gathered from known devices in the network. *Id.*

Applicants do not find in *Kracht*, however, the specific combination of elements recited in any of independent claims 1, 6, 11, or 12. For example, Applicants do not find in *Kracht* at least the elements of (i) "discovering a phone by means of a first protocol" that is different from the protocol used to discover other devices on the network, and (ii) "using discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network."

While *Kracht* might teach that the location of an unidentified device (i.e., the "black cloud device") within a network topology may be inferred from information gathered using SNMP, the Applicants find that *Kracht* is totally devoid of any teaching of the claimed elements directed to *discovering* the type and details of unidentified device with a protocol that is different from the protocol it used to discover the known devices on the network. In fact, the discovery mechanism does not *discover* the unidentified device using any protocol. See *Kracht* at col. 7, 12-13. For example, if a device in *Kracht* does not respond to the discovery mechanism's SNMP request and is therefore classified as an unidentified device, the discovery mechanism takes no further steps to discover the unidentified device. *Id.* For example, *Kracht* does not take any further steps to determine the identity and/or details of the unidentified device. *Id.* Accordingly, the Applicants submit that *Kracht* fails to teach the claimed element directed to discovering a phone by means of a first protocol that is different from the protocol used to discover other devices on the network.

Applicants also do not find in *Kracht* any teaching of the claimed element directed to using discovered information to insert a symbol representing the unidentified device in the network topology. As stated previously, the discovery mechanism in *Kracht* does not discover unidentified devices as claimed. Thus, because no discovered information exists for the unidentified device, the discovery mechanism cannot use discovered information to insert a symbol in the network topology. Instead, discovery mechanism only inserts a generalized black cloud device symbol that is not associated with the unidentified device. See generally *Kracht*. Accordingly, the Applicants submit that *Kracht* fails to teach the claimed element directed to using discovered information to insert an icon representing the phone in the relevant position in a display of the topology of the network.

Because *Kracht* does not teach or suggest all of the elements recited in any of independent claims 1, 6, 11, or 12, the Applicants submit that *Kracht* fails to anticipate these claims under 35 U.S.C. § 102(e). Further, because each of claims 2-5, 7-10, and 13-19 depend from independent claims 1, 6, and 12, and necessarily incorporate all of the elements of those claims, *Kracht* also fails to anticipate claims 2-5, 7-10, and 13-19.


Conclusion

Applicants submit that the application is in good and proper form for allowance, and respectfully request the Examiner to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney, at 312-913-3304.

Respectfully submitted,

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